

# Variations2: Improving Music Findability in a Digital Library Through Work-Centric Metadata

Mark Notess  
Digital Library Program  
Cook Music Library  
Indiana University  
Bloomington, Indiana, USA 47405  
mnotess@indiana.edu

Jon Dunn  
Digital Library Program  
Main Library E170  
Indiana University  
Bloomington, Indiana, USA 47405  
jwd@indiana.edu

## Categories and Subject Descriptors

H.3.7 [Information Storage and Retrieval]: Digital Libraries – user issues, systems issues.

## General Terms

Design, Human Factors.

## Keywords

FRBR, Cataloging, Search, Music.

## 1. ABSTRACT

The Variations2 Indiana University Digital Music Library is a large test-bed project funded in part by Phase 2 of the Digital Libraries Initiative, with support from the National Science Foundation and the National Endowment for the Humanities [4]. This demonstration will show the current state of the Variations2 test-bed software, focusing on the search user interface.

Libraries of digitized multimedia content provide access to virtual entities. In the case of music, where there may be many performances and arrangements of a given work, newer metadata models that are less item-centric or book-centric promise superior search capabilities for digital library users. The weaknesses of MARC-based music cataloging are well documented [1]. The Variations2 metadata model [3] is one such model. Like the *Functional Requirements for Bibliographic Records* (FRBR) from the International Federation of Library Associations and Institutions (IFLA) [2], our model is *work-centric*. Moreover, we have implemented a digital music library system based on that metadata model.

One benefit of the Variations2 search user interface (Fig. 1) is the use of music-specific search fields such as *key* or *performer*. A second benefit is the ability to navigate directly to the desired work within a multi-work item. A third benefit is the introduction of stepwise disambiguation of the user's search criteria. The disambiguation process varies depending both on what fields the user fills in and the actual content of the digital library. Disambiguation steps are inserted in the search process when all of the search criteria can be satisfied by a variety of results, but the specified name or work title is ambiguous with respect to the

database contents. Thus our implementation demonstrates some of the benefits of a work-centric, music-specific metadata model.

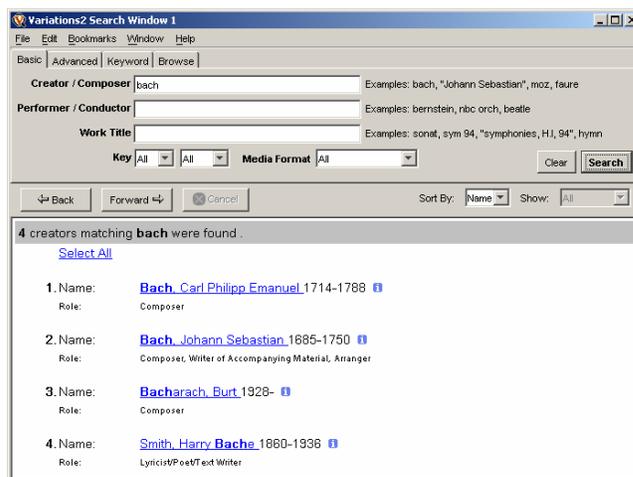


Figure 1. Search Window, Basic Tab

## 2. ACKNOWLEDGMENTS

This material is based upon work supported by the National Science Foundation under Grant No. 9909068. Any opinions, findings, and conclusions or recommendations expressed in this material are those of the authors and do not necessarily reflect the views of the National Science Foundation.

## 3. REFERENCES

- [1] Hemmasi, H. Why not MARC? In *Proceedings of ISMIR 2002: The Third International Conference on Music Information Retrieval* (Paris, France, 13-17 October 2002). IRCAM—Centre Pompidou, Paris, France, 2002, 242-248.
- [2] IFLA Study Group on the Functional Requirements for Bibliographic Records. *Functional requirements for bibliographic records*. K.G. Saur, Munich, 1998.
- [3] Minibayeva, N., and Dunn, J.W., A digital library data model for music. In *Proceedings of JCDL '02* (Portland, Oregon, 13-17 July 2002). ACM Press, New York, NY, 2002, 154-155.
- [4] Variations2: the Indiana University digital music library project. <http://variations2.indiana.edu/>.